We Claim:

1. (Currently Amended) A method for making a prognosis of disease course in a human

breast or prostate cancer patient, the method comprising the step of:

(a) obtaining a sample of a tumor from the human cancer patient;

(b) determining a level of nuclear localization of p53 protein in the tumor sample

and comparing the level of nuclear localization of p53 protein in the tumor

sample with the level of nuclear localization of p53 protein in a non-invasive,

non-metastatic tumor sample;

(c) determining a level of thrombospondin 1 expression in the tumor sample and

comparing the level of thrombospondin 1 expression in the tumor sample with

the level of thromobospoin 1 expression in a non-invasive, non-metastatic

tumor sample;

(d) determining by immunohistochemistry an extent of microvascularization in the

tumor sample and comparing the extent of microvascularization in the tumor

sample with the extent of microvascularization in a non-invasive, non-

metastatic tumor sample; and

(e) preparing a prognostic index comprising the results of the determination of

the levels of nuclear localization of p53, thrombospondin 1 expression, and

the extent of microvascularization in the tumor sample.

wherein said prognosis is predicted from considering a likelihood of further neoplastic

disease which is made when the level of nuclear localization of p53 protein in the tumor

sample is great than the level of nuclear localization of p53 protein in the non-invasive, non-

metastatic tumor sample; the level of thrombospondin 1 expression in the tumor sample is

less than the level of thromobospondin 1 expression in the non-invasive, non-metastatic

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tumor sample; and the extent of microvascularization in the tumor sample is greater than the

extent of microvascularization in the non-invasive, non-metastatic tumor sample.

2. (Original) The method of Claim 1, wherein the level of nuclear localization of p53 protein

in the tumor sample is from about twofold to about tenfold greater than the level of

nuclear localization of p53 protein in the non-invasive, non-metastatic tumor sample.

3. (Original) The method of Claim 1, wherein the level of thrombospondin 1 expression in

the tumor sample is from about twofold to about tenfold less than the level of

thrombospondin 1 expression in the non-invasive, non-metastatic tumor sample.

4. (Original) The method of Claim 1, wherein the extent of microvascularization in the tumor

sample is from about twofold to about tenfold greater than the extent of

microvascularization in the non-invasive, non-metastatic tumor sample.

5. (Original) The method of Claim 1, wherein the level of nuclear localization of p53 protein

in the tumor sample is from about twofold to about tenfold greater than the level of

nuclear localization of p53 protein in the non-invasive, non-metastatic tumor sample, and

wherein the level of thrombospondin 1 expression in the tumor sample is from about

twofold to about tenfold less than the level of thrombospondin 1 expression in the non-

invasive, non-metastatic tumor sample and wherein the extent of microvascularization in

the tumor sample is from about twofold to about tenfold greater than the extent of

microvascularization in the non-invasive, non-metastatic tumor sample.

6. (Original) The method of Claim 1, wherein the level of nuclear localization of p53 protein

in the tumor sample is from about fivefold greater than the level of nuclear localization of

p53 protein in the non-invasive, non-metastatic tumor sample, and wherein the level of

thrombospondin 1 expression in the tumor sample is from about fivefold less than the

level of thrombospondin 1 expression in the non-invasive, non-metastatic tumor sample

and wherein the extent of microvascularization in the tumor sample is from about sixfold

greater than the extent of microvascularization in the non-invasive, non-metastatic tumor

sample.

7. (Original) The method of Claim 1, wherein the level of nuclear localization of p53, the

level of thrombospondin 1 expression and the extent of microvascularization are

determined by immunohistochemical staining

8. (Original) The method of Claim 1 wherein the cancer is breast cancer.

9. (Original) The method of Claim 1 wherein the cancer is prostrate cancer.

10. (Cancelled) The method of Claim 1 wherein the cancer is melanoma.

11-20. (Withdrawn)

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